

a plurality of initially hidden rotatable symbols **108**. In this embodiment each of the rotating symbol sets **102** includes three initially hidden rotatable symbols **108**, wherein the sets generally include symbols bearing different indicia. The rotating symbol sets **102** can, however, include any number and type of symbols, including one or more of the same hidden symbols and/or including one or more blank or ghost symbols.

[0072] Each of the reels **34** has an axis of rotation **110**. Each reel **34** can collectively rotate in the same direction or rotate in different directions with respect to the other reels **34**. In addition, two sets **102** on the same reel **34** can rotate in different directions. After the rotating sets **102** stop rotating, the display device **30** or **32** displays a matrix of initially displayed and/or hidden symbols, such as a three by five matrix of said symbols. The rotating symbol sets **102** rotate about a first axis, while the reels **34** rotate about a second axis so that the sets **102** and reels **34** provide a two-dimensional slot game.

[0073] The rotating sets **102** generally rotate in a perpendicular direction to the spinning of the reels **34**. The perpendicular motions can coordinate with one another in a variety of ways. In one embodiment, the rotating symbol sets **102** automatically spin as the reels **34** spin, wherein the reels **34** come to a stop at a point in time before the rotating symbol sets **102** come to a stop or vice versa. The reels **34** can come to a stop at different times with respect to one another as can the rotating symbol sets **102**.

[0074] As described above, in one embodiment, a random event is required in order to cause one or more or all of the rotating sets to rotate. In a further alternative embodiment, the gaming device **10** provides one or more electromechanical inputs **44** or a touch screen **50** in cooperation with the sets **102** that enable the player to cause the rotating symbol sets **102** to rotate.

[0075] Any of the payout schemes described above may be implemented with the rotating symbol sets and the two-dimensional rotation of **FIG. 5**. The device can payout for each winning symbol or symbol combinations caused before and/or after one or more of the sets rotates. In another embodiment, gaming device **10** only pays out for one winning combination. In a still further embodiment, the rotating sets, such as the rotating slot machine symbol sets **102**, may be combined with one or more symbol stacks, such as slot machine symbol stacks **72** and **82** described above.

[0076] It should thus be appreciated from the above description and figures that the present invention provides a gaming device having two dimensional reel strips which facilitate a three dimensional display based on the removal of the initially displayed symbols and revealing of the initially hidden symbols. The third dimension for the symbols on the reel strip is the height of the multiple symbols.

[0077] It should be understood that various changes and modifications to the presently preferred embodiments described herein will be apparent to those skilled in the art. Such changes and modifications can be made without departing from the spirit and scope of the present invention and without diminishing its intended advantages. It is therefore intended that such changes and modifications be covered by the appended claims.

The invention is claimed as follows:

1. A gaming device comprising:
 - a plurality of reels;
 - a plurality of symbols on the reels;
 - a symbol stack on at least one of the reels, the symbol stack including an initially displayed one of said symbols and an initially hidden one of said symbols; and
 - a processor that controls the reels and the symbol stack on the reels.
2. The gaming device of claim 1, which includes a plurality of the symbol stacks on one of the reels.
3. The gaming device of claim 1, which includes at least one of the symbol stacks on each of the reels.
4. The gaming device of claim 1, wherein the symbol stack includes a plurality of initially hidden symbols.
5. The gaming device of claim 1, which includes a plurality of the symbol stacks each having a plurality of initially hidden symbols.
6. The gaming device of claim 1, wherein the symbol stack includes a predetermined number of initially hidden symbols in a predetermined order.
7. The gaming device of claim 1, wherein the symbol stack includes a predetermined number of initially hidden symbols in a randomly determined order.
8. The gaming device of claim 1, wherein the symbol stack includes a randomly determined number of initially hidden symbols in a predetermined order.
9. The gaming device of claim 1, wherein the symbol stack includes a randomly determined number of initially hidden symbols in a randomly determined order.
10. The gaming device of claim 1, wherein the initially displayed symbol is removed to reveal the initially hidden symbol upon a random event.
11. The gaming device of claim 1, wherein the initially displayed symbol is removed to reveal the initially hidden symbol upon a player input.
12. The gaming device of claim 1, wherein the initially displayed symbol is removed in conjunction with a graphical display to reveal the initially hidden symbol.
13. The gaming device of claim 1, which includes a graphical display of how many hidden symbols are included in the symbol stack.
14. The gaming device of claim 1, which includes a plurality of initially displayed symbols that are, upon a randomly determined event, sequentially revealed upon the removal of the initially displayed symbol and each previously revealed initially hidden symbol.
15. The gaming device of claim 1, which includes a plurality of initially hidden symbols that are, upon at least one player input, sequentially revealed upon the removal of the initially displayed symbol and each previously revealed initially hidden symbol.
16. The gaming device of claim 1, which includes a plurality of symbol stacks displayed on the reels, wherein initially displayed symbols of the stacks are simultaneously removed to reveal the initially hidden symbols.
17. The gaming device of claim 1, which includes a first award evaluation using the initially displayed symbol and a second award evaluation using the initially hidden symbol.
18. The gaming device of claim 1, which includes a graphical representation of the initially displayed symbol being removed and the initially hidden symbol being revealed.